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P. 2

In the Claims:

Kindly cancel claims 2, 3, and 5.

Kindly amend the claims as follows:

1. (Currently amended) A gas sensor for monitoring and controlling combustion processes comprising a sensor material of a perovskite structure oxide of formula  $ABO_x$ , wherein the A is a large 3-valent ion, wherein B is a transition metal ion substituted to a small degree by tungsten, and wherein x denotes a variable oxygen stoichiometry, wherein bulk stoichiometry of the oxide equilibrates with prevailing oxygen partial pressure, wherein the perovskite formula is  $AB_{1-y}W_yO_x$ , wherein y is in a range between 0.03 and 0.15, and wherein x is about 3.

2. (Canceled)

3. (Canceled)

4. (Currently amended) The sensor of claim 1, wherein y is in a range between 0.05 and 0.10.

5. (Canceled)

6. (Currently amended) The sensor of claim 1, wherein the perovskite structure is  $PrFe_{0.95}W_{0.05}O_x$ .

7. (Currently amended) The sensor of claim 1, wherein the perovskite structure is  $LaFe_{0.95}W_{0.05}O_x$ .

8. (Original) The sensor of claim 1, wherein the perovskite structure does not form stable sulfates in environments contaminated by sulfur.